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EXAMINER

JANKUS, ALMIS R

ART UNIT

PAPER NUMBER

2628

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/075,737	<b>Applicant(s)</b> STAUDER ET AL.	
	<b>Examiner</b> Almis R. Jankus	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicants' amendment of 5/23/07 has been fully considered in preparing this Office Action.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-5 and 9-10 are rejected, and claims 6-8 and 11-14 stand rejected under 35 U.S.C. 102(e) as being anticipated by Dye et al.

With respect to claim 1, Dye et al. teach the claimed method for estimating light sources in a common support space of at least one visual data set respectively previously associated with at least one individual support space and having a position, a dimension and a size in the common support space, said method comprising the steps of determining the position of light sources in the common support space in accordance with a position, a dimension and size of the individual support space associated with said at least one visual data set; and determining a color distribution for said light sources in the common support space according to said at least one visual data set, at figures 16, 17 and column 34 line 63 to column 35 line 22 with "FIG. 16 illustrates the display screen 142 including multiple windows and their relative positions. In this example, W0 or window 0, is the matte or the background window, and W1, W2 and W3

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are windows which overlap each other within the base window W0. The corners of the windows are indicated by the positions. W0Y0, for example, is the first line of W0 and W2Y20 at the bottom is the last line of window W2, which is at Y position 20. The same positions are true with the X coordinates. This information is programmed by the driver software into the Windows Workspace area of the system memory 110.

FIG. 17 illustrates a single raster scan line roughly corresponding to the display screen 142 of FIG. 16 and the result when the display refresh list method is used. The display refresh list method of the present invention allows the software window managers or drivers to have independent control of each application's color, position depth, and blending functions as well as individual control of indexed color. FIG. 17 presumes that there are four different process windows pointed to by Xn through Xn+3. Each of the four window workspaces contains the starting X/Y position of the window, the color depth, the Z depth, and the alpha value pointers. As shown, the first window is a single RGB direct color. The second window shows direct RGB color along with a depth buffer and an alpha buffer. The third window shows only a simple gray scale window while the fourth buffer shows gray scale with a depth buffer." Visual data sets are taught at least at column 10 lines 15-34. With respect to merging in the common support space, Dye et al. teach alpha blending at column 5 lines 8-34. Merging is inherent in alpha blending because the alpha value determines the transparency of at least two entities which are merged into one entity.

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With respect to claim 2, Dye et al. further teach the claimed for each of said visual data sets comprising the steps of determining the number  $N$  of light sources, at column 38 lines 14-59, column 40 lines 51-65, column 51 line 46 to column 52 line 44; determining the position of the  $N$  light sources, at column 34 line 63 to column 35 line 22; and determining the intensity of each light source, at column 49 lines 19-34.

Claim 3 further requires the method of claim 1, comprising the step of automatically deriving the number  $N$  of light sources from the size of the individual support space associated with the considered visual data set. Dye et al. teach this at column 51 line 46 to column 52 line 44.

Claim 4 further requires the method of claim 1, wherein said light sources position determining step depends on former positions of said light sources when at least one of said visual data sets is dynamic. Dye et al. teach this at column 2 line 48 to column 3 line 7.

Claim 5 further requires the method of claim 1, comprising the step of determining a spatial color distribution of at least one of said light sources from a filtering function of said visual data set for said at least one light source in a spatial and/or temporal neighborhood of a position of said at least one light source. Dye et al. teach this at column 6 line 48 to column 7 line 3.

Claim 6 is similar to claim 1 but further requires applying estimated light source information derived from said estimated light sources for at least a first of said visual data sets to at least a second of said visual data sets so that the first visual data set illuminates the second visual data set. Dye et al. teach this as alpha blending at column 5 lines 8-34.

Claim 7 further requires the method according to claim 6 comprising the steps of moving at least one of said light sources out of individual support space associated with said first visual data set; and applying said estimated light source information derived from said estimated light sources for said first visual data set to said second visual data set. Dye et al. teach this at column 41 lines 19-32.

Claim 8 further requires the method according to claim 6, comprising the steps of determining the position of light sources in accordance with a position, a dimension and size of an individual support space associated with said at least one visual data set; and, determining a color distribution for said light sources according to said at least one visual data set. Dye et al. teach this at column 6 line 48 to column 7 line 3.

Claims 9-12 recite features previously addressed at the rejection of claims 1-8, which are similarly rejected under similar respective rationale. In addition, claim 9 is amended to include merging in the common support space. Dye et al. teach alpha

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blending at column 5 lines 8-34. Merging is inherent in alpha blending because the alpha value determines the transparency of at least two entities which are merged into one entity.

Claim 13 recite features previously addressed at the rejection of claims 1-8 but further requires a generating device. Dye et al. teach this at figure 3.

Claim 14 further requires the means for generating to comprise an estimating device according to claim 9. Dye et al. teaches this at figure 3.

4. Applicant's arguments filed 5/23/07 have been fully considered but they are not persuasive.

In the remarks, applicants argue that the "common support spaces" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1 is not the common support space taught in Dye. However, at page 7, applicants associate common support space with a common window, or a single window, which Dye et al. teach.

Applicants further argue that Dye et al. fails to teach a single window where several visual data sets are merged together and a common window where new data sets are introduced and in which the light source is modified according to characteristics of this new data set. Claim 1 does not recite several visual data sets, new data sets

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being introduced, and modifying the light source. Applicants further submit that the common support space can be a three-dimensional space according to the specification. This feature is not claimed.

At page 8, applicants state that a scene is composed of objects, light sources and observers. At page 9, applicants state visual data sets contain objects, light sources and observers. Therefore, a scene and a visual data set are the same thing based on having the same definition. However, a scene is defined as including support spaces (windows). Thus, a visual data set also includes windows; and windows contain pixel intensities and geometry information.

The majority of the remarks compare recitations from the instant specification to recitations from Dye et al. It is impermissible for the examiner to read limitations from the specification into the claims.

5. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.



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6. The references cited by the examiner, and listed on form PTO-892 may be pertinent to applicants' disclosure.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almis R. Jankus whose telephone number is 571-272-7643. The examiner can normally be reached on M-F, 6:30-3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJ

  
ALMIS R. JANKUS  
PRIMARY EXAMINER